

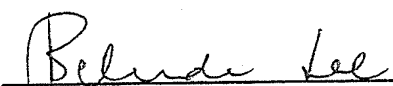
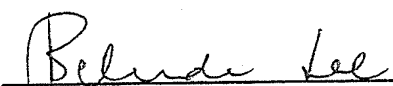
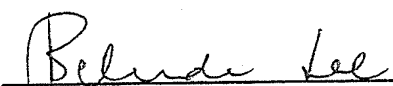
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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional)										
<p>I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 [37 CFR 1.8(a)]</p> <p>on _____</p> <p>Signature _____</p> <p>Typed or printed name _____</p>		Application Number	Filed									
		10065091	2002-09-17									
		First Named Inventor										
		Fang-Chen Luo										
		Art Unit	Examiner									
		2871	RUDE, TIMOTHY L.									
<p>Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.</p> <p>This request is being filed with a notice of appeal.</p> <p>The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided.</p> <p>I am the</p> <table border="0"><tr><td><input type="checkbox"/> applicant/inventor.</td><td> Signature</td></tr><tr><td><input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)</td><td>Belinda Lee Typed or printed name</td></tr><tr><td><input checked="" type="checkbox"/> attorney or agent of record. Registration number <u>46,863</u></td><td>011-886-2-2369-2800 Telephone number</td></tr><tr><td><input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____</td><td><u>April 22, 2009</u> Date</td></tr></table> <p>NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.</p> <table border="1"><tr><td><input checked="" type="checkbox"/> *Total of <u>1</u> forms are submitted.</td></tr></table>				<input type="checkbox"/> applicant/inventor.	 Signature	<input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)	Belinda Lee Typed or printed name	<input checked="" type="checkbox"/> attorney or agent of record. Registration number <u>46,863</u>	011-886-2-2369-2800 Telephone number	<input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34 _____	<u>April 22, 2009</u> Date	<input checked="" type="checkbox"/> *Total of <u>1</u> forms are submitted.
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This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
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9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

ARGUMENTS

This application was subjected to a Final Rejection on December 11, 2008, wherein claims 56-59 and 62-67 were rejected under 35 U.S.C. 103(a) as being unpatentable over Tanada et al (US 2002/0054257) in view of Nakai et al. (US 4,257,832), and claims 56-59 and 62-67 were rejected under 35 U.S.C. 103(a) as being unpatentable over Tanada in view of Ogawa et al. (US 6,122,027) and further in view of Nakai. In response to the Non-Final Rejection dated June 13, 2008, Applicants filed on May 6, 2008 amendments and the following remarks for explaining the non-obviousness of claims 56-59 and 62-67.

Features of the currently pending independent claim 56/67 include: 1) that *a planar color filter layer over the conformal reflective layer, wherein planar color filter layer has a substantially planar upper surface and a (bumpy) bottom surface that conformably and fully covers the conformal reflective layer;* and 2) that *a first transparent conductive layer conformably and directly on the planar color filter layer, wherein the first transparent conductive layer is connected to a thin film transistor for controlling the liquid crystal layer and the conformal reflective layer is electrically isolated from the first transparent conductive layer.*

Tanada in view of Nakai or Tanada in view of Ogawa and further in view of Nakai fails to disclose the feature 1 or 2. As shown in Fig. 1 of Tanada and described in related paragraphs [0035] to [0038], at the liquid crystal layer 30 side of the first substrate 10, an organic film 11 for corrugating a reflection film 12, a metallic reflection film 12 for reflecting light entering the liquid crystal display, color filters 13 for performing color display, **an overcoat film 14 for protecting the organic film 11 and the metallic reflection film 12 as well as for planarizing the corrugation due to the organic film 11 and the color filters 13**, electrode layers 15....are

deposited in that order. In brief, Tanada teaches that **an overcoat film 14** is formed on color filters 13 **for planarizing the corrugation** due to the organic film 11 and the color filters 13. Tanada also teaches that **the electrode layers 15 are deposited directly on the overcoat film 14** and not on the color filters 13.

It is also noted that Nakai was relied on to teach the feature of a TFT, and Nakai also fails to disclose features 1 and 2 in claim 56. As shown in Figure 8, Ogawa teaches **a gate insulating film 133 with a planar top surface** is formed on the reflective films 102 and color filters 103a-103c and black matrixes 131a-131c are formed on the gate insulating film 133. In brief, color filters 103a-103c of Ogawa are formed with a planar bottom surface and a planar top surface. **Ogawa further discloses that in order to improve smoothness and increase insulating effect, a protecting layer may be laid between the color filters 103 and the first transparent electrodes 105 (col. 9, ln. 20).**

Against the above features 1-2 and Applicants' arguments, Examiner argued:

a. The color filter layer comprising overcoat layer of Tanada does completely cover the formal reflective layer. Color filter layers in the art have long comprised clear regions, planarization portions and opaque (black mask) regions. The applied prior art color filter layer reasonably reads on Applicant's present broad claim limitations.

b. Ogawa teaches a display having color filters that do not comprise an overcoat layer. This proves the overcoat layer of Tanada was known to be not essential to such a reflective color filter display, which makes it obvious that the overcoat layer is optional.

c. It has long been well known in the art that color filters planarize (form planar top surfaces despite non-planar bottom surface); deliberate process steps are needed to force such

surfaces to be non-planar.

Applicants submit that the argument **a** by the Office is unreasonable for the following reasons. One skilled in art may consider a color filter substrate be comprised of a color filter layer, a black matrix, and possibly an overcoat layer. A skilled artisan will not consider a color filter layer be comprised of a color filter layer, the black matrix, and an overcoat layer. Even according to the teachings of the references cited by the Office, both Tanada and Ogawa consider the color filter layer being just the color filter layer itself and not including an overcoat layer. In fact, Tanada and Ogawa specifically teach forming an overcoat layer to improve smoothness and increase of insulation of the color filter layer. According to the definition of Wikipedia, as presented in the Response dated September 12, 2008, a color filter layer is a transparent colored material that is used in theatre, event production, photograph, videography and cinematograph to color light and for color correction. Hence, even by the broadest interpretation, a color filter layer could not be construed to include an overcoat layer or a black matrix, and none of the cited reference teaches or suggests a color filter layer with a planar top surface and a non-planar bottom surface, and a transparent conductive layer directly on the planar color filter layer.

Applicants submit that the argument **b** by the Office is unreasonable for the following reasons. Ogawa does not teach color filters having a non-planar bottom surface. Instead, Ogawa teaches color filters having a planar bottom surface. Hence, the top surface of the color filters could be correspondingly planar. Even so, Ogawa still teaches the application of “a protection layer be laid between the color filters 103 and the transparent electrodes 105...” (col. 9, ln. 20-23). Hence, the Office errs in concluding that the overcoat layer of Tanada is “optional” based on the teachings of Ogawa. The present invention teaches a color filter layer formed with a non-

planar (bumpy) bottom surface but with a planar upper surface and an overcoat layer is obviated.

Applicants submit that the argument c by the Office is unreasonable for the reasons below. The Office errs in concluding that the top surface of color filters are naturally planarized even the bottom surface is non-planar and deliberate process steps are needed to force such surfaces to be non-planar. In the IDS (US patent 6597421, Hatanaka et al.) submitted on Jan. 22, 2007, Hatanaka discloses a color filter layer having a non-planar bottom surface has a corresponding non-planar top surface and a flattened layer is provided thereon to obtain the desire planarity, while a color filter layer having a planar bottom surface has a y planar top surface. Hence, the conventional arts, such as Ogawa and Hatanaka, basically teach in order for a color filter layer to have a planar top surface, either the bottom surface thereof is planar or an overcoat layer is formed thereon.

Accordingly, Applicants still submit that because the prior references fail to disclose or suggest any of the above features 1-2 of claim 56 and 67, claims 56, 67 and claims 57-59, 62-66 dependent therefrom are non-obvious.

Respectfully submitted,

Date :

April 22, 2009 Belinda Lee
Belinda Lee
Registration No.: 46,863